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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/221,789	12/28/1998	ULRIKE REEH	12406-003001	4121

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EXAMINER

JACKSON JR, JEROME

ART UNIT	PAPER NUMBER
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2815

28

DATE MAILED: 01/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

221789

Applicant(s)

Reah

Examiner

90

Group Art Unit

2815

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 9/23/01
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 2, 4, 5, 10 - 34, 38 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 2, 4, 5, 10 - 34, 38 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____
 - ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s) _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 34,2,4,5,10-12,25,26,30-33, are rejected under 35 U.S.C. 103(a) as being unpatentable over Tadatsu '609 in view of Shimizu '794, Abe '230, Pearce '869, and Cox '693.

Tadatsu teaches a blue led encapsulated with fluor containing resin to improve the brightness and visibility of emission. From Shimizu it is suggested to practice yellow fluors in a device as Tadatsu to emit white light which is desirable for displays. From Abe, Pearce, and Cox taken together it would have been obvious to have practiced a thin uniform layer of fluor resin material in a device as Tadatsu with Shimizu to produce uniform brightness white light.

Applicant's claims 34,2,4,5,10-12,are obvious structure. Claims 25 and 26 are rejected because Shimizu teaches a dispersant material in the resin to improve emission quality. Claims 30-33 are rejected because the proposed uses of the device are obvious in the display art.

3. Claims 34,2,4,5,10-13,25,26,30-33, are rejected under 35 U.S.C. 103(a) as being unpatentable over Tadatsu with Shimizu, Abe, Pearce, Cox, and further in view of Thornton '758.

From Thornton it would have been obvious to have practiced multiple layers of uniform phosphor material to improve device design, reduce costs, etc. Claim 13 is obvious structure.

4. Claims 34,2,4,5,10-14,25,26,30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tadatsu with Shimizu, Abe, Pearce, Cox, and further in view of Tokailin '214.

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Tokailin teaches organic dyes in a resin matrix to enable white light emission. It would have been obvious to have practiced organic dyes in a device as Tadatsu to improve emission. Claim 14 is obvious structure.

5. Claims 34,2,4,5,10-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tadatsu with Shimizu, Abe, Pearce, Cox, Tokailin, and further in view of Mita, Chao, and Robbins.

From Mita, Chao, and Robbins it would have been obvious to have practiced inorganic fluor centers because they are shown to work excellently in epoxy based binders. Claims reciting inorganic fluors are obvious structure.

6. Claims 2,4,5,10-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tadatsu with Shimizu, Abe, Pearce, Cox, Tokailin, and Sato.

Form Sato it would have been obvious to have practiced the white light emitting device of Tadatsu, etc in a display device. Claims 30-33 are obvious uses of the light emitter.

7. Claims 2,4,5,10-12,25,26,30-34,38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tadatsu with Shimizu, Abe, Pearce, Cox, and further in view of Matoba '345.

Matoba teaches fluorescent material covered by a transparent resign to improve brightness. It would have been obvious to have practiced the same in Tadatsu with Shimizu, etc to improve brightness. Claim 38 is obvious structure.

8. Applicant's arguments filed 9/23/01 have been fully considered but they are not persuasive.


The new rejection includes Shimizu which has not been applied heretofore. Arguments

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regarding a uniform layer of material are unconvincing because it was long known in the art of display devices that uniform fluor material is beneficial for uniform light emission. It would have been obvious to practice uniform thickness fluor moldings with solid state devices to effect the same advantages of uniform light emission as taught in old fashioned devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerome Jackson whose telephone number is (703) 308-4937. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Jerome Jackson, Jr.
Primary Examiner